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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

JUSKA, CHERYL ANN

ART UNIT	PAPER NUMBER
1771	8

DATE MAILED: 03/28/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

mk-8

**Office Action Summary**

Application No.

09/485,277

Applicant(s)

NEUMAYR ET AL.

Examiner

Cheryl Juska

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 May 2000.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-53 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-42 and 45-53 is/are rejected.
- 7) ☒ Claim(s) 43 and 44 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Specification*

1. The use of the trademark BEROL has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 3, 13, 20-22, 24, 37, 38, and 45-53 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely

exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 3 recites the broad recitation "does not exceed 7%," and the claim also recites "preferred is no more than 5%, and particularly favourable is no more than 2%," which is the narrower statement of the range/limitation. Claims 20-22 and 24 are similarly rejected.

5. Claim 13 contains the trademark/trade name "Berol." Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 USC 112, 2<sup>nd</sup> paragraph. See *Ex parte Simpson*, 218 USPQ 1020. The claim scope is uncertain since the trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name.

6. Claim 37 is indefinite because it is unclear if the backing fabric, the pile, or both are comprised of the inventive cellulose fiber.

7. Regarding claim 38, the phrase "lattice-like" renders the claim indefinite because the claim includes elements not actually disclosed (those encompassed by "-like"), thereby rendering the scope of the claim unascertainable. See MPEP § 2173.05(d).

8. Claims 45-53 provides for the use of a fabric, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 45-53 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-16, 18-24, and 26-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manufacturing Processes, Viscose Process, Chapter 8, Introductory Textile Science, pages 82-85 in view of US 2,046,670 issued to Beattey and GB 2 062 652 issued to Marini et al.

Said claims are drawn to a process for making a regenerated cellulosic fiber.

Conventional process steps of making rayon fibers include treating wood pulp with sodium hydroxide to obtain an alkali cellulose, pressing, shredding into crumbs, aging, reacting with carbon disulfide to obtain cellulose xanthate, diluting in sodium hydroxide, aging, filtering and deaerating, spinning fibers into a spin bath of aqueous sulfuric acid, sodium sulfate, and additives such as zinc sulfate, passing fibers through a bath of dilute sulfuric acid, washing (Joseph, page 82-84).

Thus, Joseph teaches the process of claim 1 with the exception of (a) wood pulp shoots no older than one year of deciduous trees or conifers," (b) the ripening maturity of 5-30° Hottenroth at each aging step, (c), twisting the fibers coagulated fibers, and....

With respect to the limitations in claims 1-3 of the type, age, and lignin content of the shoots which are processed, it is asserted that this limitation is structural limitation in a method claim, and as such is not given patentable weight at this time. It has been held that to be entitled to weight in method claims, the recited structure limitations therein must affect the method in a manipulative sense, and not to amount to the mere claiming of a use of a particular structure. *Ex parte Pfeiffer*, 135 USPQ 31. Employing an alternative source of wood pulp would not change the process of making a rayon fiber.

With respect to the ripening maturity recited in claims 1, 11, 12, and 16, it is asserted that the presently claimed Hottenroth values are known in the art as suited for forming fibers of regenerated cellulose. Specifically, Marini discloses a regenerated cellulosic solution with a Hottenroth value ranging from 5-30° which is spun into a primary spin bath and a secondary bath (page 1, lines 45-51). Thus, it is asserted that the claimed Hottenroth values would have been obvious to one of ordinary skill in the art at the time of the invention since the prior art teaches said values as suitable for a viscose process.

With respect to the twisting limitation of claim 1, it is noted that Beattey teaches twisting rayon filaments in the spin bath enhances physical properties, such as lessened crease retention, of said filaments and fabrics made therefrom (col. 1, lines 1-33). Thus, it would have been obvious to one skilled in the art to twist the fibers as taught by Beattey in the viscose process taught by Joseph in order to enhance the viscose filaments.

With respect to process step (f), desulphurisation, as noted above, Marini teaches a secondary bath comprising a dilute solution of sulfuric acid, sodium sulfate, and zinc sulfate (page 1, lines 50-55). Thus, it would have been obvious to one skilled in the art to employ a secondary bath to dehydrate and desulphurise the regenerated cellulose.

With respect to the concentrations and temperature ranges recited in claims 4-6, 8-10, 13-15, 18-24, and 26-29, it is asserted that these process parameters are obvious over the prior art. Specifically, these concentrations and temperatures are not novel to the viscose process of making fibers. Thus, said claims are deemed obvious over the prior art since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 205 USPQ 215.

With respect to claim 7, although the cited prior art does not explicitly teach coarse and fine shredding steps, it is argued that these steps would have been obvious to one skilled in the art. Applicant is hereby given Official Notice that methods of shredding which employ both coarse and fine steps are well known. Thus, it would have been obvious to one skilled in the art to shred the pressed cellulosic sheet into a coarse and then into a finer size in order to produce a more uniform size.

With respect to claim 30, it is noted that Joseph teaches treatment of viscose filaments with titanium dioxide as a delustering agent.

With respect to claims 31 and 32, it is asserted that methods of drying (i.e., dehydrating) are well-known in the art. Applicant is hereby given Official Notice of such. Thus, it would have been within the general skill of a worker in the art to choose a particular drying method as a matter of obvious design choice.

With respect to claims 33 and 34, it is noted that Joseph teaches rayon fibers have an appearance of striations, due to the crenulated cross-section (i.e., fiber-parallel lamellae) (page 86-87 and Figures 8.7-8.10). Although Joseph does not explicitly teach the spacing of lamellae it is argued that this spacing would obviously have been provided as a result of the process disclosed by Joseph, Marini, and Beattey, since like materials and process steps are employed. Thus, claims 34 and 35 are rejected.

Therefore, claims 1-16, 18-24, and 26-32 are rejected as being obvious over the cited prior art.

11. Claims 17 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over the cited Joseph, Marini, and Beattey references as applied to claim 1 above, and in further view of US 5,482,776 issued to Nishiyama et al.

Although Joseph, Marini, and Beattey do not teach the mixing of the spinning dope with an additional spinning dope, this process step is known in the art. For example, Nishiyama teaches a viscose filament, prepared from a mixture of two spinning dopes having different regenerating and coagulation characteristics, wherein said filaments have a non-uniform cross-sectional shape. Thus, it would have been obvious to one skilled in the art mix two spinning dopes as is taught by Nishiyama in order to produce a rayon filament having improved properties, such as hand and luster. Therefore, claim 17 is rejected over the prior art.

With respect to claim 25, it is noted that Nishiyama teaches a spinneret having a slit-shape. Thus, it would have been obvious to one skilled in the art to employ a slit-shaped spinneret in order to produce a flat ribbon-like rayon filament. Therefore, claim 25 is rejected over the cited prior art.

12. Claims 37-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over the cited Joseph, Marini, and Beattey references as applied to claim 1 above.

Although the cited prior art does not explicitly teach a backing fabric and pile therein, it is well known in the art of carpet to employ rayon fibers for a primary carpet backing and/or pile fibers. Applicant is hereby given Official Notice of such. Additionally, it is asserted that the claimed "lattice-like" structure (i.e., scrim) is the conventional primary backing for a carpet. Furthermore, the presently claimed pile height and fiber shape are not novel to the art.

Thus, it would have been obvious to employ the rayon fibers as taught by Joseph, Marini, and Beattey, in a known carpet backing or pile fabric since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

#### ***Allowable Subject Matter***

13. Claims 43 and 44 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

15. Any inquiry concerning this communication or earlier communications from the

Application/Control Number: 09/485,277

Page 9

Art Unit: 1771

Examiner should be directed to Cheryl Juska whose telephone number is 703-305-4472. The Examiner can normally be reached on Monday-Friday 10am-6pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



CHERYLA. JUSKA  
PRIMARY EXAMINER

cj

March 25, 2002